file copy

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

December 9, 1998

Ms. Linda A. Swift, Senior Environmental Scientist
Capaccio Environmental Engineering, Inc.
75 Union Avenue
Sudbury, MA 01776-2255

Subj: Classification of Unused Integrated Circuits

Dear Ms. Swift:

This letter is in response to your November 4, 1998 request for a RCRA regulatory interpretation on unused "scrap" integrated circuits.

40 CFR 261.1(c)(4) states: "A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated." In your letter, you indicate that the unused integrated circuits are sent off-site for reclamation of precious metals and lead.

A solid waste is defined at 40 CFR 261.2(a)(1) as "...any discarded material that is not excluded by 261.4(a) or that is not excluded by variance granted under 260.30 and 260.31." 40 CFR 261.2(a)(2)(ii) goes on to state: "A discarded material is any material which is recycled, as explained in paragraph (c) of this section." Paragraph (c)(3) of 40 CFR 261.2 then states: "Materials noted with a "*" in column 3 of Table 1 are solid wastes when reclaimed."

In Table 1, the unused scrap integrated circuit would be included in the category of "commercial chemical products listed in 40 CFR 261.33", even though it is not a listed waste in 40 CFR 261.33. This is because EPA considers listed and non-listed commercial chemical products to be of the same regulatory status (see Federal Register Vol. 50, No. 70, Page 14219, April 11, 1985). According to Table 1 of 40 CFR 261.2, commercial chemical products are not a solid waste when reclaimed. Therefore, since unused scrap integrated circuits are non-listed commercial chemical products, from the federal standpoint they are not solid wastes under RCRA when they are processed to reclaim precious metals and lead. However, the Massachusetts Department of Environmental Protection (MA DEP) regulations may contain more stringent requirements. You should contact James Patterson of the MA DEP at 617/556-1096 to determine what state requirements are imposed on unused scrap integrated circuits.

The May 12, 1997 Federal Register (Vol. 62, No. 91, Pages 25998-26040) contains the final rule for Phase IV of the Land Disposal Restrictions (LDR) including exemptions from RCRA for certain processed materials (i.e., processed circuit boards). Although the rule applies to used printed circuit boards and your request pertains to unused integrated circuits, the rule should serve as guidance in the handling of unused integrated circuits. The rule states in paragraph VIII.B.1 on Pages 26011-26012:

> "The proposed exclusion was conditioned on the storage of the shredded circuit boards in **containers** prior to recovery **that would be adequate to prevent a release of the boards to the environment**. .... EPA is finalizing this exclusion as proposed with an additional limitation that shredded circuit boards excluded from RCRA jurisdiction **be free of mercury switches, mercury relays, nickel-cadmium batteries, and lithium batteries** (emphasis added)."

One final point: the residual materials which are generated during reclamation would be subject to solid and hazardous waste determinations at the point of generation.

If you have any questions about this regulatory interpretation letter, please contact Marina Cronin of my staff at (617) 918-1575.

Sincerely,

Kevin McSweeney, Associate Director for Waste Policy
Office of Ecosystem Protection

cc: Jim Miller, MA DEP
Leo Hellested, RI DEM
Stacy Ladner, ME DEP
John Duclos, NH DES
Dave Sattler, CT DEP
Peter Marshall, VT DEC
Ken Rota, EPA, OES-SER
Jeff Fowley, EPA, OEP-RCA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

October 8, 1998

Mr. J. Hyte Johnson
Environmental Health and Safety Coordinator
Walbar Metals, Inc.
Metals Peabody Operation
Peabody Industrial Center
P.O. Box 3369
Peabody, MA 01961-3369

Subj: Petition to classify a solid waste as a non-hazardous waste under 40 CFR 261.4(b)(6) and 310 CMR 30.125B

Dear Mr. Johnson:

We have received your letter to John DeVillars, Regional Administrator of EPA Region I, dated September 1, 1998, in which you petition to have your aluminizing powder waste stream excluded as a hazardous waste under 40 CFR 261.4(b)(6).

Enclosed please find your original petition which was sent to our office. We are returning it to you because EPA Region I will not ultimately be responding to your petition. Your petition must be assembled in full accordance with 40 CFR 260.20. This regulation states that the petition must be sent via certified mail to the EPA Administrator, Carol Browner, at EPA Headquarters in Washington D.C. It also lists the types of information that must be included in your petition. The initial contact person who will respond to your petition is Greg Helms. He can be reached at 703/308-8845. Greg has indicated to us that he would be willing to help you revise your petition to include all of the information necessary for Headquarters expedite your request. We advise you to take the opportunity to coordinate with Greg on the kinds of information to submit with your petition.

Massachusetts has adopted the hazardous waste exclusion at 40 CFR 261.4(b)(6). 310 CMR 30.125B(3) specifies that you petition the MA Department of Environmental Protection (DEP) to have your waste stream covered by the exclusion. Therefore, MA DEP must also respond to your petition.

Marina Cronin of my staff will serve as a liaison between MA DEP and EPA Headquarters. She will be responsible for facilitating discussions and answering questions on behalf of the region as necessary. You may contact Marina if you need her to act in these capacities.

Finally, we are enclosing a copy of the preamble discussion of the final rule amending 40 CFR 261.4 (Federal Register Vol. 45, No. 212; October 30, 1980). The preamble describes the background about the hazardous waste exclusion at 40 CFR 261.4(b)(6), as well as the procedures to obtain an exclusion. The discussions in the preamble are relevant even though there are references to the EP toxicity test (which has been replaced with the Toxicity Characteristic Leaching Procedure, or TCLP).

If you have any questions about the information contained in this letter, please call Marina Cronin at 617/565-3544.

Sincerely,

Gary B. Gosbee, P.E., Chief
Hazardous Waste Program Unit

enclosures

cc: Kevin McSweeney, EPA (without enclosures)
Ken Rota, EPA-SER (without enclosures)
Jeff Fowley, EPA-RCA (without enclosures)
Greg Helms, EPA Headquarters, OSW (without enclosures)
Jim Miller, MA DEP (without enclosures)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

October 2, 1998

Mr. Michael B. Smith,
Sites Management Section
Waste Management Division
Vermont Department of Environmental Conservation
103 South Main Street/West Building
Waterbury, VT 05671-0404

Re: Contained-In Waste Determination for Additional F032 Media, Windsor School Site, Windsor, Vermont

Dear Mr. Smith:

This letter is in response to your letter of September 3, 1998 in which you requested EPA's clarification on the applicability of EPA's July 25, 1997, "contained-in" determination for media contaminated with an F032 waste for additional F032 media that may be discovered at the same (Windsor) site as the result of a more comprehensive site investigation. As you explained in the June 25, 1998 letter and in previous correspondences between Vermont and the Environmental Protection Agency (EPA), Vermont has not yet adopted the F032 waste listing in its Hazardous Waste Management Regulations and cannot make a "contained-in" determination for this particular waste as outlined in an EPA OSWER policy letter dated September 15, 1995.

EPA believes that the conditions outlined in the July 25, 1997 "Contained-In Policy Determination" would apply to any newly discovered locations at the Windsor site. A separate contained-in policy determination will not be necessary for any newly discovered dioxin-contaminated site that was associated with the former State Prison wood treatment operation.

If you should have any questions concerning the contents of this letter, please do not hesitate to contact Stephen Yee of the Hazardous Waste Program Unit at (617) 565-3550 or me at (617) 565-3559.

Sincerely,

Kevin McSweeney, Associate Director
Waste Policy
Office of Ecosystem Protection

cc: George Desch, VTDEC
Peter Marshall, VTDEC
Lynne Hamjian, EPA
Matt Hoagland, EPA
Gary Gosbee, EPA
Sharon Leitch, EPA
Ken Rota, EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

August 11, 1998

Mr. George Desch,
Sites Management Section
Waste Management Division
Vermont Department of Environmental Conservation
103 South Main Street/West Building
Waterbury, VT 05671-0404

Re: Contained-In Waste Determination for Additional F032 Media, Windsor School Site, Windsor, Vermont

Dear Mr. Desch:

I am pleased to respond to the letter of June 25, 1998 from Ms. Lynda Provencher of your staff in which she requested EPA's clarification on the applicability of EPA's July 25, 1997, "contained-in" determination for media contaminated with an F032 waste for additional F032 media that was found at the same (Windsor) site. As you explained in the June 25, 1998 letter and in previous correspondences between Vermont and the Environmental Protection Agency (EPA), Vermont has not yet adopted the F032 waste listing in its Hazardous Waste Management Regulations and cannot make a "contained-in" determination for this particular waste as outlined in an EPA OSWER policy letter dated September 15, 1995.

The information provided in the June 25, 1998 letter and from a July 23, 1998 telephone conversation with Mr. Michael Smith of your staff indicated that two additional areas of dioxin contamination were detected as part of a more comprehensive dioxin sampling effort to determine the degree and extent of contamination at the Windsor site. This sampling effort was done in conjunction with the remediation effort of August and September 1997 and the July 25, 1997 EPA determination.

The data indicated that the first contaminated area is located in the southeast portion of the football field. Dioxin concentrations of up to 375 ppt-TEQ (at "DS90") were found in this area. A second contaminated area was found in an area that is located to the east of the baseball field. Dioxin concentrations of up to 775 ppt-TEQ (at "DS31") were found in this second area. The letter indicated that the dioxin concentrations in these two areas were considerably less that what was detected in the remediation of the "hot spot" area in 1997. The source of the dioxin contamination is believed to be from the former State Prison wood treatment operation.

Based on a review of the information provided, EPA believes that the conditions outlined in the July 25, 1997 "Contained-In Policy Determination" apply to the two newly discovered locations. A separate contained-in policy determination will not be necessary at this time.

If you should have any questions concerning the contents of this letter, please do not hesitate to contact Stephen Yee of the Hazardous Waste Program Unit at (617) 565-3550 or me at (617) 565-3559.

Sincerely,

Kevin McSweeney, Associate Director
Waste Policy
Office of Ecosystem Protection

cc: Michael Smith, VTDEC
Peter Marshall, VTDEC
Lynne Hamjian, EPA
Matt Hoagland, EPA
Gary Gosbee, EPA
Sharon Leitch, EPA
Ken Rota, EPA

FILE COPY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

topic = satellite accumulation.

July 17, 1998

James D. Fitzgerald, P.E., LSP
Environmental Resources Management
399 Boylston Street, 6th floor
Boston, MA 02116

Subj: Clarifications of RCRA generator storage requirements

Dear Mr. Fitzgerald:

This letter is written in response to inquiries contained in your letter to EPA dated May 28, 1998. In your letter, you ask for clarifications of how specific generator storage practices comply with generator requirements. Clarifications of these practices are provided below:

1. Hazardous waste in a five gallon container is accumulated in a 90-day accumulation area at a large quantity generator (LQG). The container is labeled and dated when the first drop of waste is put into the container. When the container is full, it is carried to a different 90-day accumulation area and poured into a 55-gallon hazardous waste drum, which may already contain compatible hazardous waste. There is a written procedure that requires that the date shown on the label of the 55-gallon drum be the earliest of either a) the date of the first entry of waste into the 5 gallon "feeder" container, or b) the date that other waste was first put into the 55-gallon container. This means that, on occasion, the date on the drum will be crossed out and an earlier date will be written.

   Clarification

   Although this practice is not prohibited, crossing out and rewriting the date on a container (even if changing to an earlier date) may not always be an orderly way of updating container labels, especially if wastes are transferred among several 90-day accumulation areas at a given facility. A date on a container label which is crossed out and changed could make an inspector skeptical of the operator's ability to accurately track containers. If this is the approved or agreed-upon method of tracking hazardous waste containers which are transferred from one 90-day accumulation area to another, it is imperative that the facility keep clear and updated logs of all of its 90-day hazardous waste storage containers. The facility also should consider adopting a written standard operating procedure for this practice.

2. A five gallon container is used for satellite accumulation. When it is filled up, it is immediately taken to a 90-day accumulation area, where it is poured into a 55-gallon drum. In this case, the procedure states that the date on the label of the 55-gallon drum must be the date that the first drop of hazardous waste went into the drum (not some prior date when the hazardous waste was accumulating in the satellite area).

Clarification

This practice would be acceptable ***provided that*** 40 CFR 262.34(c)(1) or an equivalent state regulation approved by EPA is met. The federal regulation states the following:

> "A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in 261.33(e) in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with paragraph (a) of this section provided he:
>
> (i) Complies with 265.171, 265.172, and 265.173(a) of this chapter; and
> (ii) Marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers."

You should consult the appropriate state's corresponding regulations on satellite accumulation to be sure that they are not more stringent. The Massachusetts Hazardous Waste Regulations at 310 CMR 30.340(4) and 30.351(4) allow both large and small quantity generators (LQGs and SQGs) to accumulate hazardous wastes in containers at or near the point of generation where wastes initially accumulate, provided that:

a. The wastes must be generated as a result of a process occurring at the specific point of generation where the wastes are initially accumulated.

b. Each such specific point of generation where wastes initially accumulate shall be under the control of the key staff individual directly responsible for the process resulting in the generation of such wastes.

c. **For each specific point of generation, only one container may be used at any one time. The maximum capacity of said container shall be as follows:**

1. **55 gallons if the hazardous waste being accumulated is hazardous waste** identified or otherwise described in 310 CMR 30.120 through 30.135; or

2. one quart if the hazardous waste being accumulated is acutely hazardous waste listed or otherwise described in 310 CMR 30.136.

Thus, Massachusetts allows (for non-acutely hazardous waste) only one container up to 55 gallons in capacity for a particular point of generation. An example which would be in compliance with the federal regulation but would not be in compliance with the Massachusetts regulation is a satellite accumulation area with three 10-gallon containers of the same waste stream.

To be "under the control of the operator of the process generating the waste", the satellite accumulation area should be located where the operator can easily observe the physical condition of the container (i.e., to prevent others from handling or tampering with the contents of the container). While it can be argued that inside an adjacent room is "near the point of generation", a satellite accumulation container located in a room adjacent to the point of generation might not be routinely observed (i.e., frequently walked past) and therefore not under an operator's control for a significant portion of a day. Satellite accumulation in a room adjacent to the point of generation may be acceptable if operator control is maintained (i.e., via locked access).

In short, for this practice to be acceptable, the satellite accumulation area must be **at or near the point of generation, and under the control of the operator of the process generating the waste**. If there is a question as to whether or not these criteria are met for a particular situation, you may wish to more fully detail the situation to EPA for a more complete clarification.

3. Is it permissible for a 90-day accumulation area and a satellite area to be present in the same room, or even adjacent to each other, provided that the two areas are separate, distinct areas?

In other words, the 90-day area would be defined as required with a sign and delineation, while the satellite container would be marked or sign-posted to confirm to an inspector that the satellite container is indeed satellite, and that it does not constitute a waste container that should be inside the 90-day area.

Clarification

It is possible for a 90-day accumulation area and a satellite area to be present in the same room, *provided that* the satellite area is, again, at or near the point of generation, and under the control of the operator of the process generating the waste. The discussion in the clarification of question no. 2 above also applies to this situation.

4. When a 90-day accumulation area comprises only a part of a room which is behind a door, is the following signage practice permissible?

A hazardous waste sign is placed on the outside face of the door leading to the area as a general warning of the character of the materials inside. Inside the room, the exact portion of the room designated for 90-day accumulation is marked in accordance with the regulations. Other materials, for example, non-hazardous wastes or virgin materials, are also present within the room but not within the delineated 90-day accumulation area.

Clarification

You indicate in this scenario that the exact portion of the room designated for 90-day accumulation is marked in accordance with regulation. You may want to actually post a sign so that upon entering through the door, it is immediately obvious which area inside the room has hazardous waste.

This practice would be permissible. However, the person responsible for maintaining the 90-day storage area should ascertain that hazardous wastes, other non-hazardous wastes, virgin materials, etc., are in the appropriate areas within this room. The responsible person should also pay special attention to spill containment and compatibility issues (i.e., if the contents of a 90-day container of hazardous waste were to spill and commingle with an incompatible substance outside of the delineated 90-day area). With respect to compatibility, the Massachusetts regulations at 310 CMR 30.340(1)(k) indicate:

> "All areas where wastes are accumulated for purposes of complying with 310 CMR 30.000 [generator requirements] generally shall be clearly marked (e.g., by a clearly visible line or piece of tape on the floor, or by a gate or fence, or by a sign at the boundary of a clearly distinguishable area) so that they are clearly distinguishable at all times from all specific points of generation where wastes are initially accumulated solely for the purposes of 310 CMR 30.340(4) [satellite accumulation requirements], and from all areas at the site of generation where wastes are not accumulated."

Please note that a facility with a satellite accumulation area(s) must meet the criteria outlined in 40 CFR 262.34(c)(1). If during an inspection a satellite accumulation area is found to be out of compliance with 262.34(c)(1), it could be cited as a violation of 90-day storage requirements. You should also confer with all applicable states where there could be facilities with any of the circumstances described above. States which are authorized for the RCRA base program could have more stringent requirements than the federal.

If you have any questions about the information discussed in this letter, please call Marina Cronin at (617) 565-3544.

Sincerely,

Edward K. McSweeney
Associate Director for Waste Policy
Office of Ecosystem Protection

cc: Ken Rota, EPA, SER
Gary Gosbee, EPA, CHW
Sharon Leitch, EPA, CHW
Al Nardone, MA DEP
Peter Marshall, VT DEC
John Duclos, NH DES
Dave Sattler, CT DEP
Leo Hellested, RI DEM
Stacy Ladner, ME DEP

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

MEMORANDUM

DATE: July 10, 1998

SUBJ: EPA Region I RCRA Program's Comments on R.I. DEM's Draft "Guidance on the Use of Evaporators in Electroplating and Metal Finishing Operations."

FROM: Edward K. McSweeney, Associate Director of Waste Policy

TO: Robert Mendoza, Director, Rhode Island State Unit

Below are the EPA Region I RCRA Program's comments on the R.I. DEM's Draft "Guidance on the Use of Evaporators in Electroplating and Metal Finishing Operations." These comments have been coordinated between the Office of Ecosystem Protection, the Office of Environmental Stewardship and the Office of Regional Counsel.

We appreciate the extensive effort made by the State in developing this policy, and support the development of appropriate mechanisms for avoiding full RCRA permitting in appropriate cases. At the same time, we believe that any regulatory interpretations must be done carefully to ensure that important public health protection requirements remain in place. With these principles in mind, we have the following comments.

1. Paragraph 6 of the State's Draft Policy provides that evaporator units, which are part of tanks, and which are permitted under the Clean Water Act, do not need to obtain RCRA permits. Based on discussions between our staffs, we understand that the State contemplates that NPDES or pretreatment permits will be issued to sources which will eliminate or limit their water discharges and will be using evaporators in lieu of having water discharges. The evaporators will of course have air emissions. The Draft Policy further provides in Note 3, however, that evaporator units approved as part of a wastewater discharge permit will be exempt from the RCRA air regulations for generator tanks (and containers) set out in 40 CFR part 265, subpart CC.

The Region opposes the use of the wastewater treatment exclusion to totally exempt evaporators from RCRA generator requirements such as the CC rule. Exempting evaporators with air emissions from the RCRA air rules, because the evaporators have water permits, does not make environmental sense. It is true that the EPA has exempted certain sources which discharge to the water pursuant to Clean Water Act requirements, from RCRA generator requirements including the CC rule. See 40 CFR § 261.5(c)(2). The NRDC and EDF have petitioned the EPA to close this "loophole," however, even as to sources which actually discharge

to the water. Totally exempting evaporators, which do not even discharge to the water, from RCRA requirements, would move the Rhode Island program in the opposite direction from what the EPA is now considering in response to the petition from these national environmental groups.

It is also true that under the federal RCRA regulations, the wastewater treatment exclusion has been applied not only to sources actually discharging to the water but also to sources which have ceased water discharges as a "direct result" of Clean Water Act requirements. See 53 Fed. Reg. 34080 - 34081 (Sept. 2, 1988). What Rhode Island is contemplating, however, is issuing water permits to evaporators as a more cost effective control mechanism in lieu of RCRA permitting. While we do not question the legitimacy of the effort, we don't think it can be fairly said that the water permits for evaporators will be issued as a "direct result" of Clean Water Act requirements. Thus the current Draft Policy is less stringent than federally required insofar as it creates a total exemption from RCRA requirements for evaporators with water permits.

The federal exemption from RCRA permitting which could be applied to evaporators, which are part of tanks, is the generator treatment in accumulation tanks and containers exemption set out at 51 Fed. Reg. 10168 (March 24, 1986). This is a partial exemption which would exempt the evaporators from the RCRA permitting requirement (during the period of allowed generator storage) while keeping in place the RCRA generator requirements including the "CC" rule.

As an authorized State, Rhode Island may issue interpretations of its hazardous waste regulations, provided that its program remains "equivalent" and no less stringent than the federal RCRA program. Rhode Island needs to revise paragraph 6 of its Draft Policy to make it equivalent and no less stringent, in one of two ways.

First, the State could drop its plan to utilize water permits in place of RCRA permits for evaporators, and instead adopt the federal treatment in accumulation tanks and containers partial exemption. This would involve deleting paragraph 6 and revising paragraph 7. We understand, however, that the State may not want to go this route, in part because it wants to maintain permits controls and oversight on evaporators, through the water program.

Thus, as a second alternative, we agree that the State may interpret its regulations to exempt evaporators from RCRA permits, if they are covered by water permits, as set out in paragraph 6. However, the State must then make clear that it is creating only a partial exemption, from RCRA permitting requirements, and that sources using evaporators remain subject to RCRA generator requirements. By doing this, the State will

impose requirements "equivalent" to those in the federal RCRA program, although in a different manner.

To make this change, the State needs to add language such as the following at the end of paragraph 6, following the statements that the evaporators will be exempt from RCRA permitting: "However, the influent wastewater must be handled as a hazardous waste and the source must be operated in compliance with RCRA generator requirements including Rule 5.00 of the Rhode Island Rules and Regulations for Hazardous Waste Management and the regulations regarding air emissions from tanks in 40 CFR part 265, subpart CC." Footnote 3 of the Draft Policy also needs to be deleted or changed.

In addition, it is critical that any water permits issued for evaporators make clear that they are not exempting the evaporators from RCRA generator requirements, but rather that these hazardous waste requirements must be complied with (as part of the federally enforceable RCRA program) in addition to complying with the terms of the permits. For water pretreatment permits to be issued by POTWs, the State should ensure that this occurs by issuing guidance and through oversight.

Finally, footnote 3 of the Draft Guidance states that the "CC" rules do not apply to small quantity generators. This is true with respect to the minimum federal requirements. However, in its regulations, Rhode Island has chosen to be more stringent in not making any distinction between large and small quantity generators. Thus, currently the "CC" rules do apply to small quantity generators in Rhode Island, and the statement in footnote 3 is inaccurate.

The State may of course change its regulations to provide that certain requirements (e.g., the "CC" rule and/or the requirement for secondary containment around tanks) only apply to large quantity generators. But unless and until such a regulation change is made, we think the Draft Guidance should be revised to be accurate. If the State proposes to make such a regulation change, we would not object to the State exercising enforcement discretion while the change was being adopted.

2. Paragraph 1 of the State's Draft Policy provides that some evaporation systems such as "vacuum evaporators" can meet the definition of a "totally enclosed treatment facility" and are thus exempt from RCRA permitting. While we agree that any system which meets the definition of a "totally enclosed treatment facility" may be exempted from RCRA permitting on that basis, we think that as currently written paragraph 1 is potentially confusing. We think it should be revised to make clear that evaporators will generally not fall within this exemption. Also, "vacuum evaporators" is not a widely used or understood term.

after accounting for all costs, to not be within the precious metal recovery exemption. For example, while plating baths often qualify for this exemption, rinse waters rarely do."

4. Paragraph 7 of the State's Draft Policy provides that RCRA permits will be required for evaporators when the various exemptions (as discussed above) do not apply and when the evaporators are used "to concentrate hazardous waste for the sole purpose of volume reduction for off site treatment or disposal." The words "for the sole purpose of volume reduction for off site treatment or disposal" should be deleted. The RCRA treatment permit requirement is not limited in that way. Deleting the "sole purpose" language in paragraph 7 will make it clear that evaporators being used even in part to concentrate hazardous waste are covered by RCRA requirements. Similarly, the word "solely" should be deleted from the last paragraph of the Draft Policy's introductory paragraphs (at the top of page 2).

As paragraph 4 of the Draft Policy points out, for an evaporator to be considered part of a manufacturing process, as opposed to a RCRA regulated process, its "sole purpose" must be to concentrate an in-process material for direct return to a plating tank. The use of the term "sole purpose" in both paragraphs 4 and 7 seems contradictory; rather the Draft Policy should make it clear that RCRA applies unless the sole purpose of an evaporator is other than waste handling.

5. In the Draft Policy, footnote one, we suggest that the State refer to its definition of hazardous waste in Rule 3.25, to clarify what it means when it says that residues from evaporators must be managed as hazardous wastes when they meet the "criteria" of a hazardous waste.

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767 TDD 401-831-5508

May 29, 1998

Robert Mendoza
U.S. Environmental Protection Agency
JFK Federal Building, CRI
Boston, MA 02203

Dear Mr. Mendoza:

Please find enclosed RIDEM's DRAFT "Guidance for the Use of Evaporators in Electroplating and Metal Finishing Operations." This policy represents a consensus position among RIDEM program supervisors and division chiefs in the Offices of Air, Waste Management, Water Resources, Compliance and Inspection, Technical and Customer Assistance and the Narragansett Bay Commission's Industrial Pretreatment Program. The leadership of the Rhode Island Contract Electroplaters (RICE) Association has also reviewed and commented on an earlier version of the guidance, and fully supports this final draft. RICE has played an active role in serving on the Evaporator Project Steering Committee and in surveying their membership concerning potential applications of evaporator technology. In addition, the University of Rhode Island's Center for Pollution Prevention is undertaking chemical engineering mass balance studies in support of said guidance.

I am hereby requesting that the USEPA review this final draft for conformance with federal policy, rules and regulations. Relative to EPA's new RCRA Subpart CC requirements, we would welcome any thoughts regarding footnote (3) on page 4.

As this policy has been a top priority for our office, we would appreciate receiving your comments at your earliest convenience. Please feel free to call me at 401/222-4700 ext. 7500 should you have any questions.

Sincerely,

Ron Gagnon, P.E.
Chief

Enclosure

cc: A. McLeod
J. Fester
E. Syzmanski
F. Vincent
M. Mahoney
R. Enander

DRAFT May 26, 1998

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

GUIDANCE FOR THE USE OF EVAPORATORS IN ELECTROPLATING AND METAL FINISHING OPERATIONS

INTENT

This guidance is intended to help clarify permit issues for members of the electroplating and metal finishing industry sector who seek to install and use evaporator technology in their facility operations. For the purposes of this policy, an *evaporator* is defined as an engineered process unit that is designed to change a substance from its liquid state to a vapor or gas.

The Rhode Island Department of Environmental Management (RIDEM) does not feel that it is environmentally or economically practical to configure manufacturing processes in a manner that requires RCRA (and/or other) permits for evaporator systems. We encourage potential users of evaporators to first pursue pollution prevention opportunities related to their manufacturing processes and second, to seek technical assistance from RIDEM, the Narragansett Bay Commission or other parties to design the evaporator unit into the process to minimize environmental impacts and avoid pursuing costly and complex environmental permits.

ENVIRONMENTAL HEALTH AND POLLUTION PREVENTION

As evaporators may result in the cross-media transfer of chemical pollutants, there is concern over the potential adverse environmental and/or human health impacts of this technology. Further, evaporators are used to reduce the volume of a waste (physical treatment) after it has been generated. *Pollution prevention*, by contrast, seeks to reduce or eliminate the generation of pollutants at their source. It includes any practice (such as substitution of raw materials, process or procedure modifications, and improvements in housekeeping, training, or inventory control) which 1) reduces the amount of any hazardous substance, pollutant or contaminant entering any waste stream prior to treatment, recycling or disposal, and 2) reduces the hazards to public health and the environment (U.S. EPA Facility Pollution Prevention Guide, EPA/600/R-92/088, 1992).

The RIDEM strongly encourages all facilities that seek to install evaporator units, to first reduce the amount of material to be treated by adopting appropriate pollution prevention methods. This approach will not only lead to a reduction in waste material generation, but may also result in significant economic savings from decreased raw material purchases, energy consumption in evaporator operation, and capital outlays for evaporator equipment purchases.

POINT OF APPLICATION AND MATERIALS PROCESSED

Evaporation technology can be used at various points in a process or waste treatment operation. Additionally, evaporators differ in their basic design (e.g., atmospheric, vacuum) as well as the

forth, in regulation or policy, a specific economic value threshold, the material must be valuable enough that the Department would be confident that any release of the material would be recovered for the sake of its precious metal content alone. This operation is subject to the requirements for "recyclable materials utilized for precious metal recovery" specified in 40CFR266.70.

(6) An evaporator unit, which is part of a wastewater pretreatment system that is operated and maintained in accordance with plans approved in a wastewater discharge permit issued pursuant to section 402 or 307(b) of the Federal Clean Water Act, as amended, and Section 46-12-5 of the General Laws of Rhode Island, as amended, and which receives and treats an influent aqueous wastewater which is a hazardous waste and meets the definition of a tank as defined in 40CFR260.10, does not require a hazardous waste treatment permit as authorized in Rule 7.01 (A) 3 of the Rhode Island Rules and Regulations for Hazardous Waste Management (see "Wastewater Discharge Permit" section below).

TSDF Permit Requirements

(1) An evaporator unit that is used to concentrate hazardous waste for the sole purpose of volume reduction for off site treatment or disposal, and does not meet the definition of a "totally enclosed treatment unit"(1 above) or is not part of a wastewater discharge permit issued pursuant to section 402 or 307(b) of the Federal Clean Water Act, as amended, and Section 46-12-5 of the General Laws of Rhode Island, as amended, will be required to obtain a TSDF Permit pursuant to Rule 7.00 of the Rhode Island Rules and Regulations for Hazardous Waste Management.

WASTEWATER DISCHARGE PERMITS

(1) Facilities proposing to use or install an evaporator unit within a process or as part of an industrial wastewater pretreatment system must first obtain approval in the form of a valid wastewater discharge permit or a revised permit (which incorporates evaporator unit design and operational criteria, and any additional documentation and/or detail of plans that may be required to properly evaluate the process operation) from the local Publicly Owned Treatment Works (POTW) or the RIDEM. In addition:

a. The evaporator system must be referenced in the facility's wastewater discharge permit issued by the local POTW, and
b. Wastes that are intended to be commingled must be chemically compatible as approved by the local POTW, and
c. The sewer authority must have an approved pretreatment program that includes procedures to periodically inspect evaporator units as necessary for compliance with relevant permit conditions, considering multi-media impacts, and
d. Only waste authorized to be treated by the POTW may be treated in the on site unit.

AIR POLLUTION CONTROL

(1) Evaporator systems that treat hazardous waste and meet the definition of a "totally enclosed treatment facility" are not required to obtain an air pollution control permit from RIDEM.
(2) Evaporators that are not "totally enclosed" and that emit less than the pollutant thresholds specified in RIDEM's Air Pollution Control Regulation 9, are not required to be permitted by the Division of Air Resources.
(3) Evaporators that are not "totally enclosed" and that emit more than the pollutant thresholds specified in RIDEM's Air Pollution Control Regulation 9, are required to obtain an air pollution control permit

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

February 27, 1998

Mary Williams, Project Director
NH/VT Solid Waste Project
24 Tremont Square, Room 218
Claremont, NH 03734

Re: Regulatory Status of Newport, NH Ash Landfill Leachate

Dear Ms. Williams:

This letter is written to address the regulatory status of leachate collected from the Newport Ash Landfill operated by the NH/VT Solid Waste District and to provide fair notice of the applicable requirements. The major issue in this matter is whether the leachate collected from the operation of the ash landfill is regulated as a hazardous waste under the Resource Conservation and Recovery Act (RCRA) or whether the leachate is somehow excluded from RCRA by either (1) the domestic sewage exclusion, (2) as an industrial wastewater since it is ultimately discharged to a Publicly Owned Treatment Works (POTW) subject to a National Pollution Discharge Elimination System (NPDES) permit or (3) by the household hazardous waste exemption. For the reasons explained below, these exclusions do not apply to the leachate under the EPA regulations. The regulations promulgated under the New Hampshire state RCRA program must also be and are as stringent as these EPA regulations.

First, in order to be regulated under RCRA, the leachate generated by the operation of your ash landfill must meet the definition of a solid waste. A solid waste is any material that is discarded by being abandoned, recycled or inherently waste-like. A material is considered to be abandoned if it is disposed of, burned or incinerated, or accumulated, stored or treated before disposal. A solid waste may qualify for an exemption from this definition if it is found to be excluded under 40 C.F.R. § 261.4(a) or (b) of the RCRA regulations.

The leachate collected from your ash landfill is accumulated and stored prior to treatment and disposal into a waterway of the United States. Both the generation of the leachate and the manner in which this material is managed meets the definition of a solid waste. With respect to a possible exclusion as a "domestic sewage," the leachate collected is the result of an industrial process (e.g., the operation of the landfill) and is not a domestic sewage which is excluded under 40 C.F.R. § 261.4(a)(1)(i). Also, the leachate is not excluded under 40 C.F.R. § 261.4(a)(1)(ii) as it is not discharged to the sewer together with domestic sewage at the landfill but rather is accumlulated on-site in a tank and is physically trucked off-site to a POTW.

Second, industrial wastewaters may be excluded from the definition of a solid waste. However, the exclusion language contained at 40 C.F.R. § 261.4(a)(2) only applies to the actual point source discharge which is located at the POTW, as explained in the "comment" under that regulation. This exclusion does not apply to the leachate or the leachate collection system located at your facility. EPA has applied the industrial wastewater treatment exemption in cases where landfill leachate from a leachate collection system was collected, treated and discharged directly into a nearby waterway under a clean water act permit. The industrial wastewater exemption under 40 C.F.R. § 261.4(a)(2) does not apply to the leachate (or sludges) generated at your facility since no clean water permit is applicable while the leachate is being collected, stored or treated prior to off-site transport and discharge to the POTW. The preamble language contained in the General Pretreatment and National Pollutant Discharge Elimination System Final Rule (FR, Vol. 55, No. 142) clarifies the regulatory status of both the domestic sewage and industrial wastewater exemptions as I have explained them to you. One of the intents of this rule was to regulate the discharge of liquid wastes that are trucked or hauled off-site to a POTW under RCRA which is the case with your ash landfill leachate

Last, under the EPA regulations, household hazardous waste need not be managed as a hazardous waste, including "household waste that has been collected, transported, stored, treated, disposed, recovered...or reused" pursuant to 40 C.F.R. § 261.4(b)(1). However, the Supreme Court determined in City of Chicago v. Environmental Defense Fund, 114 S. Ct. 1588 (1994) that this exemption does not extend to ash generated by a solid waste facility. Similarly, this exemption does not extend to leachate generated by such a facility, even if it is handling only household waste.

The leachate collected at your facility is, therefore, a solid waste under RCRA for which a hazardous waste determination is required to determine whether the leachate contains listed hazardous wastes or exhibits any of the hazardous characteristics. This determination must be conducted and known prior to any off-site shipments of this waste. Analytical results received after the leachate has been shipped off-site is an improper waste determination and defeats the purpose for sampling the leachate and conducting such a determination in the first place.

Therefore, pursuant to 40 C.F.R. § 262.11 and the corresponding New Hampshire regulations, the NH/VT Solid Waste Project is required to determine whether the leachate generated from the operation of the ash landfill is a hazardous waste. Such a determination must include the testing of sludges or sediments that may accumulate in the leachate collection tanks. Should the test results indicate that the leachate or sludges/sediments generated by the operation of the ash landfill are hazardous, the NH/VT Solid Waste Project would be required to submit a Notification of Hazardous Waste Activity, obtain a RCRA facility identification number and comply with all applicable RCRA requirements, including use of a hazardous waste manifest and the filing of a one-time notification for wastes shipped to a POTW.

This letter should hopefully clarify your obligations regarding this matter. Please contact me (617) 565-3349 if you have any further questions.

Sincerely,

Kenneth B. Rota, Environmental Protection Specialist
RCRA Technical Office

cc: William Varney, Commissioner, NH DES
Michael Sills, NH DES - Solid Waste Program
John Duclos, NH DES - Hazardous Waste Program

Lynne

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

January 9, 1998

Mr. James P. Fox
East Coast Environmental Corp.
209R Broadway
Methuen, MA 01844

re: South Bay Incinerator - ash removal

Dear Mr. Fox:

The Hazardous Waste Program Unit of EPA-New England is in receipt, by fax, of your letter dated November 14, 1997, and revisions dated November 21, 1997, in which you propose a process to remove and stabilize (treat) lead-contaminated ash from the South Bay Incinerator site. It is my understanding that you also had a phone conversation with Sharon Leitch of the EPA-New England Hazardous Waste Program Unit on January 5, 1998, in which you indicated that you no longer intend to treat the lead contaminated ash at the South Bay Incinerator site but will be shipping it off-site as a hazardous waste. Although treatment will not be occurring at the site EPA would like to clarify its position regarding the above proposed process.

In the above referenced letter you stated that you intend to treat any ash containing leachable lead in excess of the regulatory limit of 5.0 ppm by mixing it with a Portland Cement slurry as necessary to reduce the TCLP to less than 5.0. You also indicated that you feel free to conduct the proposed process as outlined based upon a February 3, 1995, federal determination in which you believe that fly ash from municipal incinerators is exempt from regulations for hazardous waste treatment until the ash exits the building.

EPA does not believe that the ash is exempt from hazardous waste treatment regulations until it exits the building. Rather, the federal determination of February 3, 1995, you refer to as allowing this exemption is based upon a May 2, 1994, Supreme Court ruling on the regulatory status of Municipal Waste Combustion Ash from resource recovery facilities. In that ruling the Supreme Court issued an opinion that ash generated at resource recovery facilities was not exempt from RCRA Subtitle C

regulations if the ash was tested and determined to be a hazardous waste. EPA-HQ clarified the point of determination of RCRA Subtitle C jurisdiction for municipal waste combustion ash in a statutory interpretation published in the February 3, 1995 Federal Register (60 FR 6666). In that determination EPA believed that the application of RCRA to the ash after it leaves the resource recovery facility would remove "potentially significant impediments" (see 60 FR 6666) to a facility whose purpose meets the intent of the RCRA statute (i.e. recovering resources). The Agency also defined what is meant by "resource recovery facility" in a March 22, 1995, memo which indicated that the definition did not include ash handling operations allowing exposure to the environment. Therefore, as soon as any ash from these facilities was exposed to the environment RCRA Subtitle C requirements would apply. While your proposal indicates that the treatment of the ash will be occurring inside the existing building EPA does not feel that the application of the February 3,1995, determination is appropriate in this case since the South Bay Incinerator is no longer an operating facility.

As indicated above, the ash contains lead which may be found at levels that would define it as a hazardous Toxicity Characteristic (TC) waste. The TC rule was promulgated by EPA under the authority of the Hazardous and Solid Waste Amendments (HSWA) and therefore is implemented by EPA in all states until such time that the states become authorized for the rule. The Commonwealth of Massachusetts will be seeking authorization for the TC rule during 1998. The implications of this on your situation would be that if the process is deemed to need a RCRA Part B permit because of the TCLP test, EPA would be the permit issuing authority in states that do not have TC authorization.

The possible exclusion from permitting which may apply to your process is found in 40 CFR § 264.1, which states that the requirements of Part 264 - Standards for owners and operators of hazardous waste TSDFs, do not apply to:

> A generator accumulating waste on-site in compliance with 40 CFR § 262.34. In connection with such accumulation, the EPA also has determined that permits are not required for generators treating their hazardous wastes in the generators' tanks or containers in conformance with the requirements of § 262.34 and Subparts I or J of Part 265. See 51 Fed. Reg. at 10168 (March 24, 1986), and 40 C.F.R. § 268.7(a)(4).

In order to qualify for this exemption from the permitting requirement, the waste must be treated by the generator and stored for no more than 90 days. In addition, the waste must be treated within tanks or containers as defined in 40 C.F.R. § 260.10. Please

note that the South Bay Incinerator building does not meet the definition of a tank or container. Thus far, it has not been demonstrated that the building meets the definition of a containment building in accordance with 40 CFR Part 264, Subpart DD. Also, we understand that the use of the "Vactor" is intended for the transfer of material not as a container for storage. Additionally, the accumulation and storage of waste in piles on the tipping room floor prior to treatment would not meet the permitting exemption requirements unless the building meets the definition of a containment building. Finally, all parts of your system involved in storing and treating the waste must meet the requirements of 40 C.F.R. § 262.34 and 40 C.F.R. Part 265, Subparts I or J, and Subparts AA, BB, and CC. In order to be excluded from the permitting requirement, you need to ensure that all of these requirements are met.

Assuming that you do qualify for the exemption from permitting, you must still meet all applicable generator requirements. In removing any ash which is a hazardous waste, you are considered to be generating a hazardous waste, even if it is then rendered non-hazardous by your treatment. The applicable requirements include obtaining an EPA ID number as the generator of a hazardous waste. 40 C.F.R. § 262.12.

In addition, while the stabilized ash will be non-hazardous if it does not fail the Toxicity Characteristic, it still must meet all applicable land disposal restrictions (LDR). The current LDR treatment standard for lead for this type of waste is 5.0 mg/l TCLP. As a generator treating wastes subject to LDR, you also will be required to develop and follow a written waste analysis plan pursuant to 40 C.F.R. § 268.7(a)(4).

Although an EPA permit will not be required for the stabilization process if you meet the requirements stated above, you are reminded that individual state regulations may be both more stringent and broader in scope than the EPA regulations. Therefore, you will need to contact the state for a determination regarding its views on the regulatory status of the stabilization process and on the disposal of the treated ash. Since Massachusetts is authorized for the base RCRA program, which includes sections 261, 262, and 264 of 40 CFR, it maintains the authority to make more stringent determinations regarding exclusions.

In summary we believe for reasons previously discussed that an EPA hazardous waste permit will not be required for the above proposed activity if you meet the requirements discussed above. However, East Coast Environmental Corp. will be subject to federal generator requirements, including LDR requirements, and also should contact the MADEP to determine if there are provisions that are more stringent or broader in scope than EPA's.

As initially stated, it is our understanding that the lead-contaminated ash will no longer be treated on-site but will be shipped off-site as a hazardous waste. Therefore, a determination regarding the status of the proposed process with respect to an exemption from the hazardous waste permitting regulations is not necessary. You are, however, responsible for meeting all applicable generator requirements pursuant to 40 CFR Part 262 and any other applicable state or federal hazardous waste regulations.

If you have any questions regarding this or any other issue, please do not hesitate to contact Gary Gosbee, Chief, Hazardous Waste Program Unit at (617) 565-3725. You may also contact Sharon Leitch, of his staff, at (617) 565-4879.

Sincerely,

Edward K. McSweeney, Associate Director
Waste Policy

cc: G. Gosbee, Chief, Hazardous Waste Program Unit, EPA
K. Rota, Acting Chief RCRA Enforcement Unit, EPA
J. Fowley, Atty., ORC-EPA
J. Miller, Chief, Waste Branch, MADEP
A. Nardone, Licensing & Permitting, MADEP
E. Pawlowski, North East Regional Office, MADEP
J. Carrigan, Compliance Assessment Branch, MADEP
B. Sirull, Waste Branch, MADEP
J. Duclos, Supervisor, Hazardous Waste Compliance Section, NHDES
D. Sattler, Supervisor, WEED, CTDEP
L. Hellested, Supervising Engineer, RIDEM
S. Ladner, Supervisor, Bureau of Remediation & Waste Management, MEDEP
P. Marshall, Chief, Hazardous Materials Management Division, VTDEC